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INTUITIVE DESIGN WITH EXCEPTIONAL VALUE

USER MANUAL

VSK-1000 USER MANUAL

Congratulations on your purchase of the VSK-1000.

With its simplicity and elegance, the VSK-1000 delivers excellent functionality at an affordable price. Its clean, perforated front bezel maximizes air intake, working together with the included rear 120 mm TwoCoolTM fan to create a professional look that stays cool. 11 drive bays and eight expansion slots support a variety of configurations, while the cable management compartment with included cable ties keep the case neat and organized. Able to meet the demands of your build while offering a sharp appearance, competitive price and an Antec AQ3 limited warranty on parts and labor, the VSK-1000 is the best choice for nearly any value-conscious build.

The VSK-1000 does not come with a power supply unit (PSU). Make sure you choose a power supply that is compatible with your computer components and has a long enough power harness to reach your motherboard and peripheral devices. We recommend our High Current Gamer, High Current Pro or TruePower New power supplies for the latest ATX specification compliance, broad compatibility, and power savings capability.

At Antec, we continually refine and improve our products to ensure the highest quality. It's possible that your new case will differ slightly from the descriptions in this manual. This isn't a problem; it's simply an improvement. As of the date of publication, all features, descriptions, and illustrations in this manual are correct.

Disclaimer

This manual is intended only as a guide for Antec's computer enclosures. For more comprehensive instructions on installing the motherboard and peripherals, please refer to the user's manuals that come with those components.

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SECTION 1 INTRODUCTION

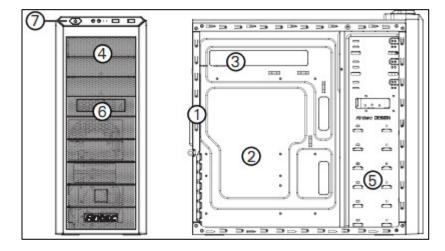
VSK-1000 USER'S MANUAL

1.1 CASE SPECIFICATIONS

Case Type	Mid Tower
Color	Black
Dimensions	18.9" (H) x 7.8" (W) x 18.8" (D) 475 mm (H) x 198 mm (W) x 490 mm (D)
Weight	15.1 lbs / 6.9 kg
Cooling	1 x top 140 mm TwoCool TM fan 1 x rear 120 mm TwoCool TM fan 2 x front 120 mm fans for HDDs (optional)
Drive Bays	11 Drive Bays: 6 x internal 3.5" 3 x external 5.25" 1 x external 3.5" 1 x internal bottom-mounted 2.5" SSD drive
Expansion Slots	8
Motherboard Size	Mini-ITX, microATX, Standard ATX
Front I/O Panel	2 x USB 2.0 AC'97 / HD Audio In and Out

1.2 DIAGRAM

- 1. 1 x 120 mm rear TwoCoolTM fan
- 2. Motherboard Mini-ITX, microATX or Standard ATX
- 3. Power supply mount
- 4. 3 x 5.25" external drive bays
- 5. 6 x 3.5" internal drive bays/bottom-mounted 2.5" SSD
- 6. 1 x 3.5" external drive bay
- 7. Front I/O panel



INCLUDED SCREWS 1.3



- A. Motherboard standoff (10; 6 preinstalled)
- B. Power supply / expansion slot screw (12)
 C. Hard drive / motherboard screw (21)
 D. Optical drive screw (12)

SECTION 2 HARDWARE INSTALLATION

2.1 SETTING UP

- 1. Place the case upright on a flat, stable surface with the rear of the case facing you.
- 2. Remove the side panels by first removing the thumbscrews at the rear of the case. Then, grip each panel at the top and bottom and slide it toward the rear of the case until it detaches from the chassis.

Note: Do not use your fingernails to pry or lift the panels.



2.2 Power Supply Installation

- With the case on its side, align your power supply with the power supply mounting location near the top panel of the case.
 Note: Power supplies with fans on the bottom of the power supply will need to be mounted so that the fan is facing the bottom of the case.
- 2. Attach the power supply to the case with the screws provided.



Note: Power supplies with fans on the bottom of the power supply will need to be mounted so that the fan is facing the top of the case. The VSK-1000 provides mounting holes for power supplies with standard mounting layouts to be installed upside up or upside down.

2.3 MOTHERBOARD INSTALLATION

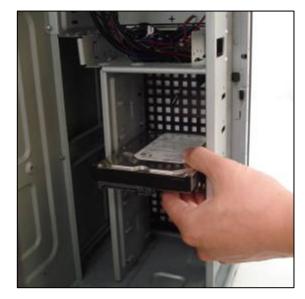
- 1. Lay the case down, with the open side facing up. The drive cages and power supply should be visible.
- 2. Make sure you have the correct I/O panel for your motherboard. If the panel provided with the case isn't suitable, please contact your motherboard manufacturer for the correct I/O panel.
- 3. Align your motherboard with the standoff holes and remember which holes are lined up. Not all motherboards will match with all the provided holes; this is normal and won't affect its functionality.
- 4. Remove your motherboard by lifting it up.
- 5. Install standoffs as needed and put the motherboard back in.
- 6. Screw in your motherboard to the standoffs with the provided Phillips-head screws.



2.4 Internal 3.5" Device Installation

The VSK-1000 provides space for up to six 3.5" hard drives.

- 1. Insert your 3.5" device into the 3.5" drive cage from the rear of the cage until the mounting holes align with the screw holes in the cage.
- 2. Fasten the device in place with the provided screws.
- 3. Mount any other 3.5" HDD devices accordingly.
- 4. Connect the appropriate power and data cables to the device(s).



2.5 EXTERNAL 5.25" DEVICE INSTALLATION

There are three externally accessible 5.25" drive bays. To access these bays, you must first remove the front bezel and drive bay cover:



- 1. Press on the three tabs pictured to the left to release the front bezel. The bezel should swing outward, like a door.
- 2. Lay the bezel face down to access the drive bay covers.
- 3. Remove the drive bay cover as shown below by pressing on the tabs and lifting the cover out of the bezel.
- 4. Slide your 5.25" device into the bay from the front of the case.
- Secure the drive into position in the drive cage using the provided screws.
- 6. Mount any other 5.25" devices accordingly.
- 7. Connect the appropriate power and data cables to your device(s).







EXTERNAL 3.25" DEVICE INSTALLATION

- 1. Press on the three tabs to release the front bezel. The bezel should swing outward, like a door.
- 2. Lay the bezel face down to access the drive bay covers.
- 3. Remove the drive bay cover as shown below by pressing on the tabs and lifting the cover out of the bezel.
- 4. Slide your 3.5" device into the bay from the front of the case.
- 5. Secure the drive into position in the drive cage using the provided screws.
- 6. Connect the appropriate power and data cables to your device(s).

2.7

INTERNAL 2.5" DEVICE INSTALLATION

At the bottom of your case, there are mounting holes designed to support one 2.5" SSD device.

- 1. Locate the plastic bag labeled "For 2.5 HDD" and remove the 4 silicone grommets.
- 2. Install the grommets into the four holes at the base of the case at the bottom of the drive bay area as shown. You should install them with the thick part of the grommets facing the inside of the case.



- 3. Lay the VSK-1000 on its side, and hold the drive in place on top of the grommets.
- 4. Secure the device to the case with the screws provided, tightening the screws with your fingers first, and then the screwdriver.
- 5. Connect the appropriate power and data cables to your device

2.8 CABLE MANAGEMENT

There is a cable management compartment behind the 3.5" drive cage. You can tuck or route excess cables in this compartment.

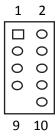
- 1. Remove the right enclosure panel.
- 2. Locate the cable management compartment with cable ties located behind the walls of the 3.5" drive cage.
- 3. Tuck or route your excess cables to the compartment. This will keep the cables from interfering with airflow in your case and help with cooling.
- 4. Use the cable ties provided to hold them in place.



SECTION 3 FRONT I/O PORTS

3.1 USB 2.0

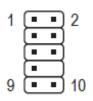
Connect the front I/O panel USB cable to the USB header pin on your motherboard. Check the motherboard user's manual to ensure that it matches the table below:



Pin	Signal Names	Pin	Signal Names
1	 USB Power 1 Negative Signal 1 Positive Signal 1 		USB Power 2
3			Negative Signal 2
5			Positive Signal 2
7	Ground 1	8	Ground 2
9	Key (No Connection)	10	Empty Pin

3.2 AC'97 / HD Audio Ports

There is an Intel® standard 10-pin AC'97 connector and an Intel® 10-pin HDA (High Definition Audio) connector linked to the front panel of the case.



Pin	Signal Names (HDA)	Pin	Signal Names (AC'97)	
1	MIC2 L	1	MIC In	
2	AGND	2	GND	
3	MIC2 R	3	MIC Power	
4	AVCC	4	NC	
5	FRO-R	5	Line Out (R)	
6	MIC2_JD	6	Line Out (R)	
7	F_IO_SEN	7	NC	
8	Key (no pin)	8	Key (no pin)	
9	FRO-L	9	Line Out (L)	
10	LINE2_JD	10	Line Out (L)	

You can connect either the AC'97 or the HDA connector, depending on your motherboard. Locate the internal audio connectors from your motherboard or sound card and connect the corresponding audio cable. Consult your motherboard or sound card manual for the pin-out positions. Even if your system supports both standards, only use one connector.

Connected to your front panel are LED and switch leads for power and HDD LED activity. Attach these to the corresponding connectors on your motherboard. Consult your motherboard manual for specific pin header locations. For LEDs, colored wires are positive (+). White or black wires are negative (-). If the LED does not light up when the system is powered on, try reversing the connection. For more information on connecting LEDs to your motherboard, see your motherboard user's manual.





Note: Polarity (positive and negative) does not matter for switches.

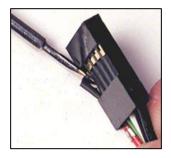
3.4

REWIRING MOTHERBOARD HEADER CONNECTIONS

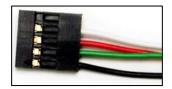
There may come a time when you need to reconfigure the pin-out of a motherboard header connector. Examples could be for your USB header, audio input header, or some other front panel connector such as the Power Button connector.

Before performing any work, please refer to your motherboard user's manual or your motherboard manufacturer's website to be sure of the pin-out needed for your connector. We strongly recommend making a notated drawing before beginning work so that you can recover if your work gets disturbed.

- Determine which wires you need to remove in order to rewire your
 plug to match the USB pin-outs on your motherboard (refer to your
 motherboard user's manual). Working on one connector at a time, use
 a very small flathead screwdriver or similar tool to lift up on the black
 tab located beside the gold posts (squares). This will allow you to
 easily slide out the pins from the USB plug.
- 2. Working carefully so as not to damage the wires, connectors, or pins, slowly remove the pin from the connector. Repeat these steps for each wire you need to change.
- 3. Working carefully so as not to damage the wires, connectors or pins, slowly reinsert the pin into the correct slot of the connector then snap closed the black tab that was lifted in step 1. Repeat these steps for each wire you need to change.







4.1 INCLUDED FANS

There is a 120 x 25 mm TwoCool™ fan preinstalled at the rear of the case. The fan is installed so the air will be blown out of the case. This fan comes with a two-speed switch that let you choose the speed best suited to your need. The default fan speed setting is Low.

120 mm TwoCoolTM Specifications

Size: 120 x 25 mm TwoCoolTM fan

Rated Voltage: 12V

Operating Voltage: $10.8V \sim 13.2V$

Speed (RPM)	Input Current	Airflow	Static Pressure	Acoustic Noise	Input Power
High 1500	0.30A (Max.)	1.4 m³ / min (51.2 CFM)	1.2 mm-H ₂ O (0.05 inch-H ₂ O)	27.9 dBA	3.6W
Low 900	0.18A	0.08 m³ / min (30.1 CFM)	0.5 mm-H2O (0.02 inch-H2O)	16.9 dBA	2.2W

Top TwoCoolTM Fan – The case comes with a 140 mm top exhaust fan. The fan is installed so the air will be blown out of the case. This fan comes with a two-speed switch that let you choose the speed best suited to your need. The default fan speed setting is Low.

140 mm TwoCoolTM Specifications

Size: 140 x 25 mm TwoCoolTM

Rated Voltage: 12V

Operating Voltage: $10.8V \sim 13.2 V$

Speed (RPM)	Input Current	Airflow	Static Pressure	Acoustic Noise	Input Power
High 1200	0.3A (Max.)	1.7 m³ / min (58.9 CFM)	0.8 mm-H2O (0.03 inch-H2O)	26.0 dBA	3.6W
Low 800	0.2A	0.95 m³ / min (33.6 CFM)	0.3 mm-H2O (0.01 inch-H2O)	21.8 dBA	2.4W

Note: The minimum voltage to start a typical TwoCoolTM fan is 5V. We recommend that you set the fan speed to High if you choose to connect the fan(s) to a fan control device or to the Fan-Only connector found on some Antec power supplies. A fan control device regulates the fan speed by varying the voltage, which may start as low as 4.5V to 5V. Connecting a TwoCoolTM fan set on Low to a fan-control device may result in the fan not being able to start because the already lowered voltage from the fan control device will be further reduced by the TwoCoolTM circuitry below 5V.

4.2 OPTIONAL FANS

There are two optional 120 mm front intake fan mounts at the front of the HDD cage. We recommend using Antec 120 mm speed control fans and setting the speed to Low. These fans must be installed so that the air is blowing into the case.

Front Fans – You can install two 120 mm fans to the fan cages in front of the hard drive bays. To install the front fans:

- 1. Remove the front bezel as described in section 2.5
- 2. Secure your 120 mm fan(s) to the fan holder. The fan should be installed so that air is blowing into the case.
- 3. Reattach the fan holder to the case by inserting the right side into the corresponding slots on the front of the case, then rotating the holder back into position until it clicks into place.

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